

**Amendments to the Claims**

Please amend claim 10 as indicated in the listing of claims.

Please add claim 24.

The listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

1.-9. (Cancelled)

10. (Currently amended) DNA encoding a chimeric isoprenoid sesquiterpene synthase polypeptide, wherein said chimeric isoprenoid sesquiterpene synthase polypeptide comprises two polypeptide domains: a first isoprenoid sesquiterpene synthase polypeptide domain joined to a second different isoprenoid sesquiterpene synthase polypeptide domain such that the chimeric isoprenoid sesquiterpene synthase polypeptide encoded by the DNA catalyzes: ~~(1) the production of at least one isoprenoid sesquiterpene synthase reaction product that is not produced by the first in the absence of the second isoprenoid sesquiterpene synthase polypeptide domain domain alone;~~ or (2) ~~the production of more than one isoprenoid reaction product in a ratio differing from the ratio of the products produced in the absence of the second isoprenoid synthase polypeptide domain.~~

11. (Original) A vector comprising the DNA of claim 10.

12. (Original) A cell comprising the DNA of claim 10.

13. (Original) The cell of claim 12, wherein said cell is *E. coli*.

14. (Original) The cell of claim 12, wherein said cell is a plant cell.

15. (Previously presented) A transgenic plant comprising the DNA of claim 10.

16. (Previously presented) A vector comprising the chimeric isoprenoid synthase gene of claim 10 and a dominant selectable marker.

17. (Previously presented) The vector of claim 16 further comprising additional elements selected from the group consisting of a promoter regulatory region, a transcription initiation start site, a ribosome binding site, an RNA processing signal, a transcription termination site, and a polyadenylation agent.

18. (Previously presented) The vector of claim 11 comprising a transcription initiation regulatory region.

19. (Previously presented) The vector of claim 11 comprising a transcription termination regulatory region.

20. (Previously presented) The DNA of claim 10 wherein the chimeric isoprenoid synthase polypeptide encoded by the DNA includes therein a DDXXD motif.

21. (Previously presented) A vector comprising the DNA of claim 20.

22.-23. (Cancelled)

24. (New) The DNA of claim 10 wherein the isoprenoid sesquiterpene synthase reaction product is not produced by either the first or the second isoprenoid sesquiterpene synthase polypeptide domains alone.